

REMARKS

Claims 1-5, 7, 9-12, and 14-52 are pending following entry of this Amendment.

The amendment to claim 7 finds support on page 2, lines 13-14 of the application and added claims 26-52 find support inter alia in the originally filed claims and at page 2 of the specification and in the Examples.

REJECTION OF THE CLAIMS UNDER 35 U.S.C. 102

A. The Examiner rejected claims 1-5, 7-12 and 14-21 under 102 (b) as anticipated by WO 98/24883.

In particular, the Examiner continues to maintain that the cited reference discloses a solid composition comprising a MAS and an additive where the preferred MAS is 4,4-dimethyl-5 α -cholesta-8,14,24-triene-3 β -ol.

In response to Applicant's arguments that the cited reference provides a cell culture medium containing one or more synthetic lipids or lipid precursors, eg a sterol or a metabolically acceptable derivative thereof, in a solution stabilized by one or more surfactants and in the substantial absence of protein and of phospholipids" (page 5, lines 20-25, emphasis added), the Examiner asserts that the phrase "and in the substantial absence of protein and of phospholipids" does not mean it is absolutely free of proteins and phospholipids and cites to page 9, lines 29-34 of WO 98/24883 as teaching that it may be advantageous to add a small quantity of insulin.

Applicant respectfully traverses this rejection.

First, Applicant disputes the Examiner's assertion that WO 98/24883 discloses solid compositions comprising MAS and an additive such as a protein or phosphoglyceride.

The disclosure in WO 98/24883 is to cell culture medium and not to solid compositions comprising MAS and an additive such as a protein or phosphoglyceride. Whenever sterols are mentioned in WO 98/24883, it is always in the context of a solution or a medium. For example, the specification teaches on page 5, lines 20-24 that "the present invention provides a cell culture medium containing one or more synthetic lipids

or lipid precursors, eg a sterol or a metabolically acceptable derivative thereof, in a solution stabilized by one or more surfactants” and on page 6, lines 29-31, when specific amounts of cholesterol are mentioned it is in units of weight/vol and not vol/vol. Also, the specification discloses that “[T]he cholesterol or other sterol and the surfactant may be prepared in a concentrated solution for addition to a basal medium...” (page 6, lines 35-37, emphasis added). Thus, claims to a solid composition of MAS and an additive such as a protein or phospholipid are not disclosed by WO 98/24883.

Second, Applicant can find no disclosure in WO 98/24883 of the specific MAS compounds that are mentioned in dependent claim 5 nor of the compound 4,4-dimethyl-5 α -cholesta-8,14,24-triene-3 β -ol which is the subject of added claims 35-49 and in this regard, Applicant respectfully requests that the Examiner point to where in WO 98/24883 such compounds are specifically disclosed.

Third, in response to the Examiner’s assertion that the phrase “and in the substantial absence of protein and of phospholipids” in WO 98/24883 does not mean that the medium described therein is absolutely free of proteins and phospholipids, Applicant notes that claims 7, 9-11 and 50 are directed to an aqueous solution of a solid composition comprising a meiosis activating substance (MAS) and an additive which is a protein or a phosphoglyceride, wherein the solid composition has a content of protein or phosphoglyceride higher than 99% (weight/weight), and that claims 28-34 are directed to an aqueous solution comprising a meiosis activating substance (MAS) and an additive which is a protein or a phosphoglyceride, wherein the ratio of MAS to said protein or phosphoglyceride in said aqueous solution is at least 1:150 (weight/weight). In addition dependent claims 26-27 are directed to a solid composition having a content of protein or phosphoglyceride higher than 99% (weight/weight) and claims 51-52 are directed to an aqueous solution of such a composition.

Applicant submits that the above limitations (“higher than 99%” and “ratio of MAS to additive of at least 1:150”) in claims 7, 9-11, 26-34 and 50-52 are not disclosed in the cited art as the phrase “and in the substantial absence of protein and of phospholipids” cannot be construed to disclose such limitations.

Accordingly, in view of the above amendments and remarks, Applicant submits that WO 98/24883 cannot anticipate the claims and withdrawal of the rejection is respectfully requested.

- B. The Examiner rejected claims 1-5, 7-12 and 14-22 as being anticipated under section 102 (a) by WO 00/52142.

The Examiner notes on page 2 of the present Office Action that this rejection will be maintained until Applicant submits an executed Declaration claiming the benefit of Danish application PA 1999 01308, filed on September 16, 1999.

In response, Applicant notes that an executed substitute Declaration claiming the benefit of Danish application PA 1999 01308, filed September 16, 1999, was submitted to the Patent Office on May 29, 2003 (courtesy copy submitted herewith). As previously noted, since the present application was filed on September 14, 2000; ie, before November 29, 2000 and within one year of the filing date of the aforementioned Danish application, the claim to benefit is believed to be timely submitted (see MPEP 201.13).

Accordingly, since the cited WO 00/52142 application was published on September 8, 2000; ie after the September 16, 1999 filing date of Danish application PA 1999 01308 to which benefit is claimed, the WO 00/52142 application is not prior art to the pending claims and withdrawal of this rejection is therefore respectfully submitted.

REJECTION OF THE CLAIMS UNDER 35 U.S.C. 103

The Examiner rejected claims 1-5, 7-12 and 14-25 under section 103 as obvious over WO 98/24883 taken with Wang [J.Parenteral Science and Technology (1988) 42:4-26]. WO 98/24883 is cited as above in the section 102 (b) rejection and Wang is cited as teaching the use of additives which are human serum albumin or phosphoglyceride. The Examiner therefore concludes that in view of Wang, "one of ordinary skill in the art would have been motivated to adapt the above scheme of using additives which are proteins or phosphoglyceride for the intended purpose of stabilizing a solid composition comprising a

meiosis activating substance, because such features of stabilizing any protein of interest by using the additives of the secondary reference are.....known in the art “ (page 10 of Office Action).

Applicant respectfully traverses this rejection.

As noted above in response to the section 102 (b) rejection, WO 98/24883 does not teach 1) solid compositions comprising MAS and an additive such as a protein or phosphoglyceride; 2) the specific MAS compounds that are mentioned in dependent claim 5 nor the compound 4,4-dimethyl-5 α -cholesta-8,14,24-triene-3 β -ol which is the subject of added claims 35-49; and 3) the limitations “higher than 99%” or “ratio of MAS to additive of at least 1:150” in claims 7, 9-11, 26-34 and 50-52.

The cited secondary reference of Wang does not remedy these deficiencies. Wang teaches that in parenteral formulations of peptides and proteins, serum albumin or phospholipids may be used to stabilize the peptides or proteins. Wang, either alone or in combination with WO 98/24883, neither teaches nor suggests the use of serum albumin or phospholipids in solid compositions comprising MAS; the specific MAS compounds that are mentioned in dependent claim 5 nor the compound 4,4-dimethyl-5 α -cholesta-8,14,24-triene-3 β -ol which is the subject of added claims 35-49; or the limitations “higher than 99%” or “ratio of MAS to additive of at least 1:150” in claims 7, 9-11, 26-34 and 50-52.

Accordingly, Applicant submits that pending claims 1-5, 7, 9-12 and 14-52 are not obvious over the cited art and withdrawal of this rejection is therefore respectfully requested.

REJECTION OF THE CLAIMS UNDER 35 U.S.C. 112, SECOND PARAGRAPH

The Examiner’s rejections of claim 8 are rendered moot by the cancellation of this claim without prejudice in the present Amendment.


Serial No.: 09/661,696
Express Mail Label No.: EV 409530505 US

In view of the above amendments and remarks, the present application is believed to be in condition for allowance.

Early and favorable consideration by the Examiner is respectfully solicited.

Respectfully submitted,

Date: March 4, 2004


Richard W. Bork, Reg. No. 36,459
Novo Nordisk Pharmaceuticals, Inc.
100 College Road West
Princeton NJ 08540
(609) 987-5800

Use the following customer number for all correspondence regarding this application

23650

PATENT TRADEMARK OFFICE